

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Walter W. Nielsen (Reg. No. 25,539) on 6/26/08.

The claims had been amended as follows:

### **IN THE CLAIMS**

1. (Currently Amended) A method to be performed by a data processing system to improve fault tolerance comprising:

providing distributed queuing of workflows, whose execution is requested by one or more execution-requesting clients, among a plurality of workflow engines;

only if a workflow is successfully completed by a first workflow engine for an execution-requesting client, sending a notification to the execution-requesting client, else assigning the workflow to a subsequent workflow engine by sending it a work assignment message, in response to which the subsequent workflow engine alone performs the workflow; and

sending a notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine;

wherein sending the notification is performed by a certified messaging capability;

wherein the certified messaging capability is performed by a load manager; and

wherein the load manager comprises a commercially available middleware product;

the certified messaging capability sending the notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine.

2. (Currently Amended) The method recited in claim 1, wherein providing is performed by the [[a]] load manager.

3-8. (Canceled)

Art Unit: 2195

9. (Currently Amended) A method to be performed by a computer network comprising a plurality of clients and a plurality of workflow engines:

providing distributed queuing of workflows, whose execution can be requested by one or more execution-requesting clients, among the plurality of workflow engines; and

determining whether a workflow has been successfully completed by a first workflow engine on behalf of an execution-requesting client;

only if so, sending a notification to the execution-requesting client;

otherwise, assigning the workflow to a subsequent workflow engine by sending it a work assignment message, and the subsequent workflow engine alone performing the workflow; and

sending a notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine;

wherein sending is performed by a certified messaging capability;

wherein the certified messaging capability is performed by a load manager; and

wherein the load manager comprises a commercially available middleware product;

the certified messaging capability sending the notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine.

10. (Currently Amended) The method recited in claim 9, wherein providing is performed by the [[a]] load manager.

11-16. (Canceled)

Art Unit: 2195

17. (Currently Amended) A computer adapted for use in a computer network comprising a plurality of workflow engines, the computer executing a computer program, the computer program operating the computer in a fault-tolerant manner and comprising the operations of:

requesting a workflow execution on behalf of a client;

a distributed queuing capability assigning the workflow execution to a first workflow engine;

determining whether the workflow execution has been successfully completed by the first workflow engine;

only if so, sending a notification to the client;

otherwise, assigning the workflow execution to a subsequent workflow engine by sending it a work assignment message, and the subsequent workflow engine alone performing the workflow; and

sending a notification to the client only if the workflow is successfully completed by the subsequent workflow engine;

wherein sending is performed by a certified messaging capability; and

wherein the certified messaging capability is performed by a certified message receiver in the first workflow engine;

the certified messaging capability sending the notification to the client only if the workflow execution is successfully completed by the subsequent workflow engine.

18. (Previously Presented) The computer recited in claim 17, wherein requesting is performed by a load manager.

19-21. (Canceled)

Art Unit: 2195

22. (Currently Amended) A computer network comprising:  
a plurality of clients;  
a plurality of workflow engines; and  
at least one computer program, the computer program operating in a fault-tolerant manner and performing the operations of:  
requesting a workflow execution on behalf of a client;  
assigning the workflow execution to a first workflow engine;  
determining whether the workflow execution has been successfully completed by the first workflow engine;  
only if so, sending a notification to the client;  
otherwise, assigning the workflow execution to a subsequent workflow engine by sending it a work assignment message, and the subsequent workflow engine alone performing the workflow; and  
sending a notification to the client only if the workflow is successfully completed by the subsequent workflow engine;  
wherein sending is performed by a certified messaging capability; and  
wherein the certified messaging capability is performed by a certified message receiver in the first workflow engine;  
the certified messaging capability sending the notification to the client only if the workflow execution is successfully completed by the subsequent workflow engine.

23. (Previously Presented) The computer network recited in claim 22, wherein requesting is performed by a load manager having a distributed queuing capability.

24-26. (Canceled)

Art Unit: 2195

27. (Currently Amended) A computer-readable medium containing computer instructions for instructing a processor, the processor adapted for use in a computer network comprising a plurality of workflow engines, wherein the instructions comprise:

requesting a workflow execution on behalf of a client;

a distributed queuing capability assigning the workflow execution to a first workflow engine;

determining whether the workflow execution has been successfully completed by the first workflow engine;

only if so, sending a notification to the client;

otherwise, assigning the workflow execution to a subsequent workflow engine by sending it a work assignment message, and the subsequent workflow engine alone completing the workflow; and

sending a notification to the client only if the workflow is successfully completed by the subsequent workflow engine;

wherein sending is performed by a certified messaging capability; and

wherein the certified messaging capability is performed by a certified message receiver in the first workflow engine;

the certified messaging capability sending the notification to the client only if the workflow execution is successfully completed by the subsequent workflow engine.

28. (Original) The computer-readable medium recited in claim 27, wherein requesting is performed by a load manager.

29-31. (Canceled)

Art Unit: 2195

32. (Currently Amended) An article comprising a machine-accessible medium having instructions for instructing a processor forming part of a plurality of workflow engines, wherein the instructions, when accessed, result in a machine performing:

- requesting a workflow execution on behalf of a client;
- assigning the workflow execution to a first workflow engine;
- determining whether the workflow execution has been successfully completed by the first workflow engine;
- only if so, sending a notification to the client;
- otherwise, assigning the workflow execution to a subsequent workflow engine by sending it a work assignment message, and the subsequent workflow engine alone completing the workflow; and

- sending a notification to the client only if the workflow is successfully completed by the subsequent workflow engine;

- wherein sending is performed by a certified messaging capability; and
- wherein the certified messaging capability is performed by a certified message receiver in the first workflow engine;

- the certified messaging capability sending the notification to the client only if the workflow execution is successfully completed by the subsequent workflow engine.

33. (Previously Presented) The article recited in claim 32, wherein requesting is performed by a load manager having a distributed queuing capability.

34-36. (Canceled)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH TANG whose telephone number is (571)272-3772.

The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth Tang/  
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